

## Schulingkamp, Joseph

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**From:** Edward Wiener <Edward.Wiener@phila.gov>  
**Sent:** Wednesday, December 17, 2014 2:12 PM  
**To:** Schulingkamp, Joseph  
**Subject:** RE: PES RACT

**Categories:** Red Category

Joe,

When I list a number, it is from the official EPA comments. The last one relates to a comment from Emlyn in her feedback on the memo asking where the limit came from.

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**From:** Schulingkamp, Joseph [Schulingkamp.Joseph@epa.gov]  
**Sent:** Wednesday, December 17, 2014 1:21 PM  
**To:** Edward Wiener  
**Subject:** RE: PES RACT

Sounds good, I'll start on this one right now and see if I can't get it back to you before the end of the week (we have a Christmas party tomorrow so I don't know how much I'll be able to get done with all the noise/kids running around). Just so I'm understanding correctly, the comments you're talking about in the email are EPA's formal comments we provided during the public comment period back in Oct right? Or are you talking about other comments Emlyn gave you on a draft exchanged post-comment period? Also, in the email, it looks like at the end of comment 1 you were going to say something about LDAR...

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**From:** Edward Wiener [mailto:Edward.Wiener@phila.gov]  
**Sent:** Wednesday, December 17, 2014 12:25 PM  
**To:** Schulingkamp, Joseph  
**Subject:** FW: PES RACT

Joe,

I'm going to e-mail you some facilities where Emlyn did not or may have not received drafts created after her comments.

Attached are the latest memo and plan approval for PES based on Emlyn's comments. Ignore all issuance dates and electronic signatures on any plan approvals we send you at this point, we haven't actually issued any of them. Please note the following:

Comment #1 - The Sunoco 1-hour RACT did address both the Refinery (PLID 01501) and Tank Farm (PLID 01517). The Tank Farm was covered in Sunoco's RACT proposal and the Plant ID of 01517 was included in the RACT plan approval and the permit number in the SIP. The Tank Farm consists of storage tanks covered by CTG RACT regulations. We didn't include these in the RACT plan approval the way we did for some presumptive RACT heaters at the Refinery. I don't know why. The LDAR

#2, #5 & #6 - I forgot to make sure Henry put the attached PES RACT Update in the proposed SIP package. It will be in the one that goes to PADEP.

#3 - I fixed the missing heaters.

#4 - I clarified the language some. None of the heaters or boilers are allowed to burn #6 oil in the revised RACT plan approval.

#7 - Both FCCUs have throughput permit limits both on a daily basis and on a rolling 365-day basis. I used the daily limit in Table 1 since that is the short-term limit and seems most comparable to the capacities listed for other units. The annual PTE calculation for the 868 FCCU is based on its rolling 365-day limit and for the 1232 FCCU comes from a plan approval tpy limit, which I believe was derived from its rolling 12-month throughput limit.

100 ppmvd NOx limit for 868 FCCU - This limit comes from a PES "Low NOx CO Combustion Promoter Study" they were required to do as part of a Global Consent Decree. As I understand it, they were required to conduct a study and propose a NOx limit to EPA based on it. Apparently EPA hasn't acted in this proposal yet. PES based their RACT update on it, so we are carrying it into RACT.

Please let me know if you have any more comments.

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**From:** Velez-Rosa, Emlyn [Velez-Rosa.Emlyn@epa.gov]  
**Sent:** Monday, December 01, 2014 4:42 PM  
**To:** Edward Wiener  
**Cc:** Fernandez, Cristina; Thomas Huynh; Schulingkamp, Joseph; Mastro, Donna; Vyas, Himanshu  
**Subject:** RE: PES RACT

Ed:

Find attached my recommended revisions. Various comments made to the proposed SIP have not yet been addressed yet by your revised memo. See comments below. If you do not intend revise the memo in response to any one comment, please specify.

Philadelphia Energy Solutions (PES) (formerly Sunoco- R&M)

1. On page 17, AMS states that "PES, including the Tank Farm, is subject to the 1-hour RACT determination (PA Permit Numbers 51-1501 and 51-1517) dated August 1, 2000, and approved into the SIP by EPA on October 31, 2001, 66 FR 54942 under the facility's former name Sunoco Inc. (R&M) – Philadelphia." This statement is incorrect, since the 1-hour RACT determination approved by EPA did not address RACT for the Tank Farm.
2. AMS must provide the actual and potential emissions of each emissions source at PES. To support PTE, AMS should specify the most stringent Federally-enforceable limitation that applies to each source, and all appropriate assumptions used.
3. The following existing NO<sub>x</sub> emissions sources at the refinery, that are subject to the presumptive RACT requirements of 25 PA Code Sections 129.93(b)(2)-(5), were not listed as part of the memorandum: Unit 860- 2H1 (49 million British Thermal Unit per hour (MMBTU/hr) of heat input

rating), Unit 860- 2H6 (36.7 MMBTU/hr), Unit 860- 2H8 (49.6 MMBTU/hr), Unit 864-PH2 (45 MMBTU/hr), Unit 1332 H-1 (45 MMBTU/hr), Unit 1332 H-3 (43 MMBTU/hr), Unit 1332 H-600 (21 MMBTU/hr), Unit 1332 H-601 (48 MMBTU/hr), and Unit 1332 H-602 (49 MMBTU/hr).

4. ...
5. AMS did not provide sufficient information to evaluate the control feasibility analysis provided for PES for emissions sources subject to source-specific RACT. AMS did not provide justification for determining technical infeasibility of the controls evaluated for each emissions source, and did not provide a discussion of the methodology used for estimating cost-effectiveness of technically feasible controls. Without this information, EPA is unable to properly evaluate the source-specific NO<sub>x</sub> and VOC RACT evaluations provided for the emissions sources at PES.
6. On pages 20 and 33 of the proposed SIP, AMS explains that PES has submitted a RACT proposal to determine source-specific NO<sub>x</sub> and VOC RACT for the emissions sources at the facility. AMS should include the PES submittal as part of the SIP revision to further support AMS proposed RACT.
7. On page 29, AMS states that the potential NO<sub>x</sub> emissions of the fluid catalytic cracking unit (FCCU) 868 are based on the applicable limit of 47,500 barrels per day on a rolling 365 day-rolling average, while in Table 1, page 18 AMS states a potential capacity of 50,000 barrels per day. Please clarify.
8. (...) Additionally, the PES Title V operating permit (No. V95-038) does not list AMR V Section V as an applicable requirement for the tank truck loading operations at the refinery. Please clarify.
9. AMS has not provided potential VOC emissions from the refinery cooling towers nor sufficiently evaluated available controls for controlling VOC emissions from the towers.
10. On page 27, AMS proposes NO<sub>x</sub> emissions rates as RACT for various heaters and boilers in terms of pounds per million British Thermal Units (lb/MMBTU) per rolling 365-day basis. These limits are essentially annual limits that are measured on a daily basis for more stringency. As explained earlier, EPA believes short-term averaging is appropriate in setting emissions limits for RACT, typically a 30-day rolling average. AMS should provide justification of why these limits adequately represent RACT for these emissions sources.

*Emlyn Velez Rosa*

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**From:** Edward Wiener [<mailto:Edward.Wiener@phila.gov>]

**Sent:** Monday, November 24, 2014 6:09 PM

**To:** Velez-Rosa, Emlyn

**Subject:** PES RACT

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